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MEAN WELL

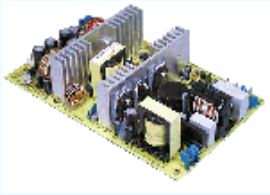
SWITCHING POWER SUPPLY

ISO-9001 CERTIFIED MANUFACTURER

PPQ-1003 SERIES

Jameco Part Number 213807 (PPQ-1003D)

- .LOW COST, HIGH RELIABILITY
- .COMPACT SIZE, LIGHT WEIGHT
- .105° C OUTPUT CAPACITOR
- .100% FULL LOAD BURN-IN TEST
- .INTERNATIONAL AC INPUT RANGE
- .BUILT IN EMI FILTER, LOW RIPPLE NOISE
- .HIGH EFFICIENCY, LOW WORKING TEMPERATURE
- .SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
- .SHORT CIRCUIT, OVERLOAD, OVER VOLTAGE PROTECTED



MODEL / SPECIFICATION	PPQ-1003A				PPQ-1003B			
	CH1	CH2	CH3	CH4	CH1	CH2	CH3	CH4
DC OUTPUT VOLTAGE	3.3V	5V	12V	-5V	3.3V	5V	12V	-12V
OUTPUT V. TOLERANCE	±3%	±3%	±6%	±6%	±3%	±3%	±6%	±6%
OUTPUT RATED CURRENT	10A	10A	2A	0.3A	10A	10A	2A	0.3A
OUTPUT CURRENT RANGE	0-15A	2-15A	0.2-3A	0-1A	0-15A	2-15A	0.2-3A	0-1A
RIPPLE & NOISE(Vp-p)	100m	100m	150m	100m	100m	100m	150m	120m
LINE REGULATION	±1%	±1%	±2%	±1%	±1%	±1%	±2%	±1%
LOAD REGULATION	±2%	±2%	±6%	±1%	±2%	±2%	±6%	±1%
DC OUTPUT POWER	108.5W				110.6W			
EFFICIENCY	72%							
DC VOLTAGE ADJ.	CH1,2:+10%,-5%							
INPUT VOLTAGE RANGE	90~264VAC 47~63Hz; 127~370VDC							
AC CURRENT	1.65A/115V 0.85A/230V							
INRUSH CURRENT	COLD START 40A							
LEAKAGE CURRENT	<1mA/240VAC							
OVERLOAD PROTECTION	105%~135% RESET:AUTO RECOVERY							
OVER VOLTAGE PROTECTION	CH1:3.6~4.3V, CH2:5.75~6.75V							
OVER TEMP. PROTECTION	----------							
TEMP. COEFFICIENT	±0.03% / °C (0~50°C)							
SETUP, RISE, HOLD UP TIME	800ms, 50ms, 16ms							
POWER FACTOR	PF>0.95/230VAC, PF>0.98/115VAC							
VIBRATION	10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES							
WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC							
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:500VDC / 100M Ohms							
WORKING TEMP., HUMIDITY	-10°C~+60°C (REFER TO OUTPUT DERATING CURVE), 20%~90% RH							
STORAGE TEMP., HUMIDITY	-20°C~+85°C, 10%~95% RH							
DIMENSION	7"*4.25"*1.6" (177.8*107.95*40.64mm)							
WEIGHT	0.5Kgs							
SAFETY STANDARDS	MEET UL1950, TUV EN60950							
EMC STANDARDS	MEET CISPR22 (EN55022) CLASS B							

NOTE :
1. ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25°C 70% RH. AMBIENT.
2. TOLERANCE : INCLUDE SET UP TOLERANCE, LINE REGULATION, LOAD REGULATION.
3. RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.
4. LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.
5. LOAD REGULATION IS MEASURED FROM 20% TO 100% RATED LOAD, AND OTHER OUTPUT AT 60% RATED LOAD.
6. EACH OUTPUT PROVIDE UP TO MAXIMUM CURRENT, BUT TOTAL LOAD CAN NOT EXCEED MAX. OUTPUT POWER.

2000-11-02

NEXT (MECHANICAL INFO)

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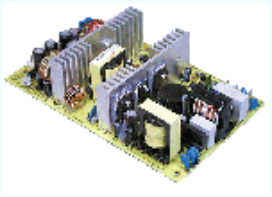

MODEL / SPECIFICATION	PPQ-1003C				PPQ-1003D			
	CH1	CH2	CH3	CH4	CH1	CH2	CH3	CH4
DC OUTPUT VOLTAGE	3.3V	5V	15V	-15V	3.3V	5V	12V	24V
OUTPUT V. TOLERANCE	±3%	±3%	+10,-5%	±6%	±3%	±3%	±6%	±6%
OUTPUT RATED CURRENT	10A	10A	1.5A	0.3A	10A	10A	2A	0.3A
OUTPUT CURRENT RANGE	0-15A	2-15A	0.2-3A	0-1A	0-15A	2-15A	0.2-3A	0-1A
RIPPLE & NOISE(Vp-p)	100m	100m	180m	150m	100m	100m	150m	150m
LINE REGULATION	±1%	±1%	±2%	±1%	±1%	±1%	±2%	±1%
LOAD REGULATION	±2%	±2%	±6%	±1%	±2%	±2%	±6%	±1%
DC OUTPUT POWER	110W				114.2W			
EFFICIENCY	72%							
DC VOLTAGE ADJ.	CH1,2:+10%,-5%							
INPUT VOLTAGE RANGE	90~264VAC 47~63Hz; 127~370VDC							
AC CURRENT	1.65A/115V 0.85A/230V							
INRUSH CURRENT	COLD START 40A							
LEAKAGE CURRENT	<1mA/240VAC							
OVERLOAD PROTECTION	105%~135% RESET:AUTO RECOVERY							
OVER VOLTAGE PROTECTION	CH1:3.6~4.3V, CH2:5.75~6.75V							
OVER TEMP. PROTECTION	----------							
TEMP. COEFFICIENT	±0.03% / °C (0~50°C)							
SETUP, RISE, HOLD UP TIME	800ms, 50ms, 16ms							
POWER FACTOR	PF>0.95/230VAC, PF>0.98/115VAC							
VIBRATION	10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES							
WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC							
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:500VDC / 100M Ohms							
WORKING TEMP., HUMIDITY	-10°C~+60°C (REFER TO OUTPUT DERATING CURVE), 20%~90% RH							
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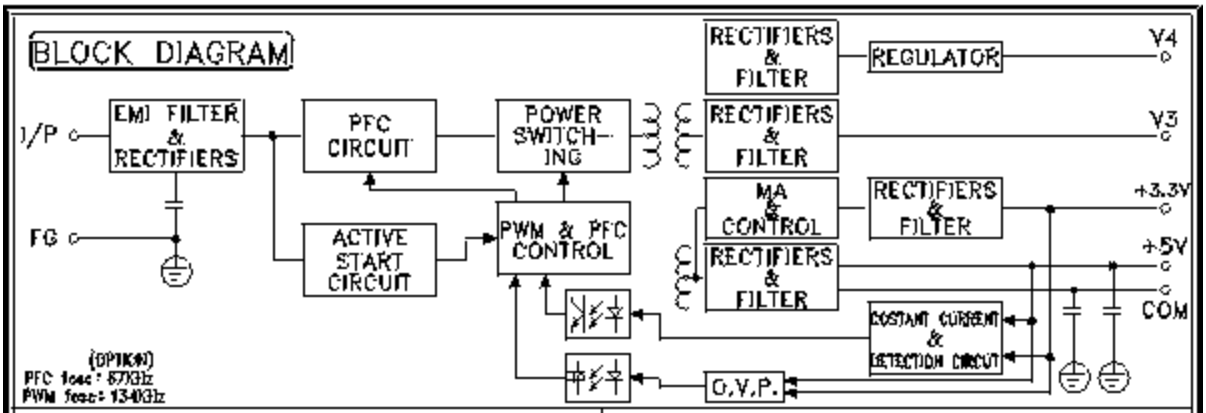
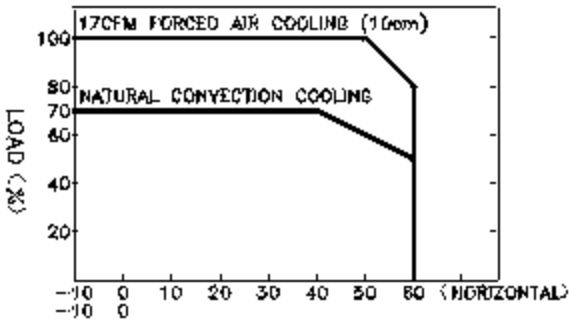
PPQ-1003 SERIES

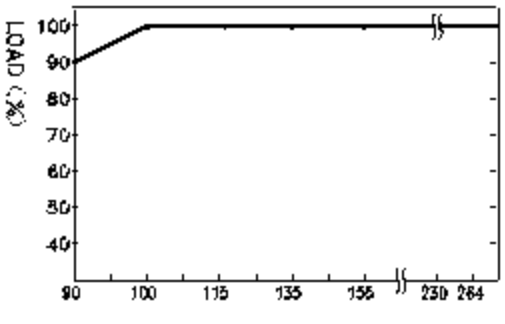
BLOCK DIAGRAM



OUTPUT DERATING VS Ta



OUTPUT DERATING VS INPUT VOLTAGE



DIMENSION (mm)

- TERMINAL PIN NO. ASSIGNMENT
  - CN1 : JST B3P-VH
    PIN 1,3 ; AC INPUT
  - CN2 : JST B5P-VH
    PIN 1,2,3 ; DC OUTPUT V2
    PIN 4 ; DC OUTPUT V3
    PIN 5 ; DC OUTPUT V4
  - CN3 : JST B8P-VH
    PIN 1,2,3 ; DC OUTPUT V1
    PIN 4,5,6,7,8 ; DC OUTPUT COM
- MATING CONNECTORS
  - CN1,2,3 MATING CONNECTOR TYPE JST VHR SERIES OR EQUIVALENT WITH JST SVH-21T-1.1 OR EQUIVALENT CRIMP TERMINALS.